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ABSTRACT

This research synthesis identifies critical aspects of curriculum as they relate to the successful school-to-work transition of students with disabilities. The first section provides basic information on transition and covers the goal of transition, its framework, the transition process, and school personnel involvement. The second section reviews transition-related curricular issues, discussing existing models of transition and a proposed model which focuses on individualized skill building in the academic, social, vocational, and independent living areas, with skills characterized as either first-order (core) skills, higher-order skills, or goal-specific skills. Also reviewed here are studies supporting this model; studies of post-school outcomes; and planning, instructional, and assessment practices which impact on the effectiveness of transition services. The third section summarizes areas of need and provides guidelines for the development of quality curricular tools. These guidelines are organized according to the content, application, and philosophy of these tools. This section ends with a discussion of barriers to development and use of quality tools. A conclusion stresses the importance of focusing on self-determination as the main educational goal. An appendix summarizes barriers to effective transition and guidelines for development of curriculum tools. (Contains approximately 150 references.) (DB)

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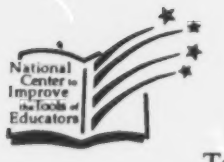

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Research Synthesis on Design of Effective Curricular Practices in Transition from School to the Community

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January 3, 1995

National Center to Improve the
Tools of Educators (NCITE)

DESIGN OF EFFECTIVE CURRICULAR PRACTICES IN TRANSITION FROM SCHOOL TO THE COMMUNITY

Research Synthesis

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January 3, 1995

In 1986, Madeline Will articulated the school-to-work or transition priority of the Office of Special Education Programs (Will 1986a, 1986b). Since that time the concept of transition has become a national priority for all students (America 2000) and has expanded in the scope of its focus, whole-life rather than narrowly defined as work related (Halpern, 1993). The need to teach extra-vocational skills (i.e., the skills needed to succeed in jobs, live independently, maintain health, live as a family, engage in leisure activities and participate in civic activities) is becoming increasingly apparent (Boyer-Stephens & Kearns, 1988; Gajar, Goodman, & McAffe, 1993) .

As defined in federal education statutes, transition is:

> A coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing education, adult services, independent living, or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation. (Individuals with Disabilities Education Act Amendments, 1990, Section 602 [A], 20 U.S.C. 1401 [A])

The definition of transition found in Individuals with Disabilities Education Act Amendments (IDEA) provides clear direction to the development of special education programs and their content. If the overall goal of transition activities is to prepare students to move into adult lives, then ALL curriculum and ALL instructional tools are transition related. The remainder of this manuscript will identify critical aspects of curricula, as they relate to successful transition. Section A provides the foundation for transition and includes the goals and target populations. Section B provides a review of transition-related curricular issues. Discussed in this

section are: general curricular model; a proposed a model from which transition-related curricular offerings can be selected or developed; supporting literature for the proposed model, including a brief review of selected curricular offerings; and planning, instructional, and assessment practices which impact on the effectiveness of transition services. Limitations for this synthesis conclude this section. Section C summarizes areas of need and then provides guidelines for the development of quality curricular tools. These guidelines are organized according to the content, application, and philosophy of these tools. This section ends with a discussion of barriers and a synthesis conclusion.

SECTION A

Foundations

The word "transition" is a simplistic phrase used to embody many complex phenomena that occur throughout life. The complexity of this concept is acknowledged in IDEA and extended beyond the limited scope of school to adult-life. In IDEA, congress identified many transitions that students with disabilities will encounter throughout their lives. The expanded list includes transition from: medical care to school, institutions to community-based options, and segregated special education to integrated education (20 USC 1409 (c)). Planning related to each of these transition-periods, like planning for school to adult life, requires identification of long-term outcomes, short and long term needs, and the specification of processes to meet the goals identified for the individual student. It also provides a broader framework in which to embed the educational process and goals. The goals of transition from school to adult life are presented in this section along with a discussion of who is the focus of the current transition from school to work initiatives.

Goal

The goal of transition activities is to assist the student in developing the behaviors necessary to meet the needs and demands of self, family and community during adult life. As such, transition is both a process of and a framework for education. As a process there are specific steps to be accomplished that are intended to enhance students' success in post-school outcomes. As a framework, transition provides the structure to evaluate and synthesize curriculum content needs for each child. It provides the focus for developing individualized curriculum while keeping the overall goals of schooling in mind. The framework and process of

transition are discussed below.

Framework

A variety of authors in both regular and special education have attempted to define what are the goals of schooling, and thus the goals of transition. The mission of education, "... special (or general)[,]...is not restricted to the teaching of academic subjects, nor is it to protect students from a harsh adult environment. It is to prepare them to participate fully in the mainstream adult world" (Siegel & Sleeter, 1991, p.27). Participating in the mainstream means that these individuals are prepared to lead contributing and self-satisfying lives (Benz & Halpern, 1986; 1987).

Ysseldyke, Thurlow and Gilman (1993) identified six domains that must be addressed in preparing students for the adult world. These domains are: physical health, responsibility and independence, contribution and citizenship, academic and functional literacy, personal and social adjustment, and satisfaction. These domains are part of those that also form the core of outcomes that are reflected in Quality of Life (QOL) models. It is important to remember that QOL is determined by and intertwined with the culture and context of the individual's life (Goode cited in Dennis, Williams, Giangreco, & Cloninger, 1993). However, there appears to be some consensus that to have a high quality of life, minimal standards need to be met in specific areas (Edgar, 1987). Halpern (1993) identified three "meta-domains" that reflect those facets proposed by Edgar (1987) as essential QOL entitlements for all people: "physical and material well-being, performance of adult roles, and a sense of personal fulfillment" (p.490). Most authors would agree that these are essential post-school outcomes.

Writers outside of special education echo these same beliefs. Copa and Pease (1992)

include "a guaranteed set of learner outcomes closely linked to present and future life roles and responsibilities for all students" (p. 2) as an important features of the 21st century high school. Glasser (1992) defines the quality of a curriculum by the usefulness of the content to student, now and in future. This utility is individually determined; and to be useful, students should be taught how, when, where, and why to use the knowledge and skills.

IDEA reacquaints us with the fundamental framework for developing individually determined quality curriculum for students with disabilities, the IEP. Schriner and Bellini (1994) underscore the importance of the IEP by referring to the IEP as "the tool which 'drives' the process by which the student is prepared for, and becomes engaged in, adult living" (p.20). In fact, successful or unsuccessful transition outcomes can be seen as a direct result of the cumulative IEP process. In all probability, success will be enhanced if the first IEP written is considered as important in the transition process as the last IEP written before school leaving (Michaels, 1994).

IDEA requirements for the IEP are specific to both the content and process when transition planning is involved. All students with disabilities must have transition from school to adult life addressed within the context of their IEP by at least age 16. As stated in the definition of transition, the content of these IEPS must include: instruction, community experiences, objectives and activities related to employment and adult outcomes, and when necessary include daily living skills and a functional vocational evaluation. IEPS that do not include services in any of these areas must document the committee's decision not to include the area, and the basis from which that decision was made. In the position statement of the CEC Division of Career Development, Clark, Carlson, Fischer, Cook, and D'Alonzo (1991) state that the IEP must be

used to get beyond instruction in basic academics. It should identify instructional needs related to developing knowledge and skills related to: daily living; age-appropriate values, attitudes, behaviors, and interpersonal relationships in the home, school and community; and the world of work. Beyond attempting to ensure that the content of instructional programs facilitate successful outcomes for students with disabilities, IDEA mandates processes related to transition planning.

Process

For students receiving special education services, professionals have the IEP process to ensure that instructional experiences are useful to students in current and future environments. IDEA requires that transition activities be implemented through the IEP process and must include:

> A statement of the needed transition services for students beginning no later than age 16 and annually thereafter (and, when determined appropriate for the individual, beginning at age 14 or younger), including when appropriate, a statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting. (Individuals with Disabilities Education Act Amendments, 1990, Section 602 [A], 20 U.S.C. 1401 [A])

Formal planning activities are conducted by a team of individuals that includes school and post-school professionals, parents/guardians, students, and related community members (e.g., employers) (Everson & Moon, 1986; Hanley-Maxwell & Chadsey-Rusch, 1986). Planning considers: (a) student goals and objectives (reflecting job, home, community skills); (b) specific services needed to accomplish those goals; and (c) referral to appropriate agencies, specific placements, and specific follow-up procedures/services (Wehman, 1986; Wehman, Moon, Everson, Wood, & Barcus, 1988).

The process of transition extends far beyond the mere planning of services. Successful movement from school to adult life requires that the individual receive a solid educational foundation that prepares him/her for their various adult roles, careful longitudinal planning, and

the provision of post-school supports and services that were identified in the planning process (Wehman, Kregel, & Barcus, 1985). Locating and linking with those post-school services are also critical aspects of the transition process (D'Alonzo, Owen, & Hartwell, 1985; Brolin, 1982, 1983; Kokaska & Brolin, 1985).

A general transition process can be described as a composite sketch derived from critical aspects identified through study results or author opinion in the extant literature. This general process includes:

(a) identify students (D'Alonzo et al., 1985);

(b) assess both student and the current and potential settings (Brown & Kayser, 1982);

(c) intervene (D'Alonzo et al., 1985) by assisting in career development (Brolin, 1982, 1983; Kokaska & Brolin, 1985), improving the match between the individual and current/future environmental demands through correction, compensation or circumvention (Brolin, 1982, 1983; Kokaska & Brolin, 1985) and other instruction (Wehman et al., 1985) or specific training (D'Alonzo et al., 1985);

(d) evaluate interventions (Brown & Kayser, 1985; D'Alonzo, 1985);

(e) plan (Wehman et al., 1985);

(f) identify and secure needed resources in both the school and home (Brolin, 1982, 1983; Kokaska & Brolin, 1985);

(g) place (Brolin, 1982, 1983; Kokaska & Brolin, 1985; D'Alonzo et al., 1985; Wehman et al., 1985); and

(h) follow (Brolin, 1982, 1983; Kokaska & Brolin, 1985; D'Alonzo et al., 1985).

Much of the current conception of transition and related best-practices appears to focus on the secondary and post-secondary years. In fact, Michaels (1994) equates transition with adolescence as he describes the life events of that time period. "Adolescence (and transition) is a time of ... taking responsibility for one's self, separating from parental control and values, separating from the control of the school system, and developing an internal locus of control" (p. 12). However, understanding the basic premises of transition provides a guide for evaluating decisions related to what, why, when, where and how teachers assess, plan and teach (Stodden & Leake, 1994) throughout the educational process. Before turning to these issues (in Section B), the topic of who transition is for must be explored.

Who

When school personnel ponder the question of who should receive transition services, the answer should be ALL students (Wehman, 1992). The issue of smoothly moving students from their childhood roles and responsibilities to those of their adulthood is a significant problem for all students, including those with disabilities.

Federal law currently mandates transition planning and services for students who have an IEP and thus, are receiving special education services[1]. While each student possess unique talents and needs, many share common educational barriers. In general, learners with disabilities can be described by the following characteristics: most experience a slower rate of learning, all have acquired fewer skills than their nondisabled peers at time of school leaving, many do better with concrete learning as opposed to abstract learning, incidental learning can not be assumed, and skill generalization and maintenance problems are common. Additionally, many of these students experience difficulties in the areas of language and communication, interpersonal relationships,

and behavioral control (Henley, Ramsey, & Algozzine, 1993; Snell, 1987). However, characteristics of learner groups are irrelevant when the larger context of transition is considered. Instead, attention to transition and the development of activities and tools to enhance the transition of students from school to adult roles is based on overall post-school outcome data for students with disabilities, and the individual needs of each student.

The IDEA emphasis on the provision of transition services is the result of data which consistently indicate that students with disabilities have poor post-school outcomes. Follow-up studies describe exiting students as individuals who: (a) tend to be poor, (b) tend to be from ethnic minority families, and (c) tend to not adjust well to adult life in the community (Affleck, Edgar, Levine, & Kortering, 1990; Brolin, Durand, Kromer, & Muller, 1975; Edgar, 1987; Hasazi, Gordon, & Roe, 1985; Wagner et al., 1991).

Longitudinal studies indicate that simply getting the student to the point of graduation may be difficult. Benz and Halpern (1987) report that an average of 22% of all student with disabilities drop out of school (compared to a 12% drop out rate for peers without disability). In a study of students in the state of Washington, Edgar (1987) found drop out rates that varied according to disability classification: 42% of students with learning disabilities or behavior disorders, 18% of students with mild mental retardation, and 16% of students in regular education. Finally, the data from the National Longitudinal Transition Study (Wagner, 1989) indicate that 26% of the special education students (and 25% of regular education students) in the study exited school by dropping out, 56% graduated. The drop out rates for students with emotional disabilities or learning disabilities are much higher, 55% and 36% respectively (Wagner, 1989; 1993).

Students who drop out of school have dismal post-school outcomes. When considering drop outs with learning or behavior disabilities, data indicate that only 39% were working or receiving any type of educational program (Edgar, 1987).

More worrisome is the data that indicate poor post-school outcomes for students with disabilities who do graduate. Edgar (1987) found that while 84% of graduates who had learning or behavioral disabilities were working or in school, only 18% earned more than minimum wage. Furthermore, for graduates with mild mental retardation, 41% were working or going to school but only 5% earned more than minimum wage. Finally, for students with more severe disabilities (students who NEVER drop out of school), data indicated that 53% became employed after leaving school (Edgar, 1987). However, within the context of this study, employment was not defined as community employment. Other data indicate that most graduates with severe disabilities work in sheltered settings, are underemployed in other jobs, or are unemployed (Rusch, 1986). While other follow-up studies vary in their exact percentage of graduates who begin working immediately after graduation, post-school employment data consistently reflects poor outcomes for a large portion of all former students with disabilities (Mithaug, Horiuchi, & Fanning, 1985, Hasazi et al., 1985; Hasazi, Gordon, Roe, Hull, Fink, & Salembier, 1985; Kortering & Edgar, 1988; Neel, Meadows, Levine, & Edgar, 1988; Bruininks, Lewis, & Thurlow, 1988; Sitlington & Frank, 1990; Scuccimarra & Speece, 1990).

Post school outcomes also indicate difficulties in other areas of life, such as: establishing social relationships and living independently (Benz & Halpern, 1987; Chadsey-Rusch, DeStefano, O'Reilly, Gonzalez, & Collet-Klingenberg, 1992; Chesler, 1992; Fafard & Haubrich, 1981; Gertzel & Gugerty, 1992; Sitlington, Frank,& Carson, 1992; Wagner, 1989; Zigmund & Thorton,

1985) Wagner (1993) found that while only 14.7% of former students with learning disabilities were living independently two years after graduation, this number climbed to 44.1% five years after graduation. This increase appears to be encouraging, however this enthusiasm is dampened when two further statistics are included. Within five years after graduation, 50% of this same cohort of students were parenting (compared with only 21% of their nondisabled peers) and 31% had been arrested at least once (Wagner, 1993). The goal of transition-related activities is to improve these outcomes for students.

SECTION B

Transition Curriculum

While there are several suggested curricular models, no single model exists that incorporates all known aspects thought to be critical for transition success. These existing models and a proposed integrative model intended to enhance transition success are discussed below. Additionally, theoretical literature and research that support the proposed model, including several examples of popular curricular tools are reviewed. Finally, a review of instruction, assessment, and planning practices that enhance transition outcomes are reviewed. The section ends with a presentation of the limitations of this synthesis.

Existing Models

Gajar et al. (1993) identify basic models of curriculum currently found in secondary schools. These are the functional skill models (i.e., vocational/employment preparation and independent adult living skills); the process model (i.e., learning strategies, effective learning/problem solving); and the academic skills models (i.e., tutorial, completing regular education requirements; compensatory, continuation of academic progress; and basic skills, basic academic and functional literacy). At the secondary level, Gajar et al. (1993) indicate that "the primary decision involves a choice between academic and functional curricular programs" (p. 195). The curricular decision should be made by considering the purpose of each type of curriculum and then matching this purpose to learner traits.

Functional curriculum is clearly described by Boyer-Stephens and Kearns (1988). They describe the functional curriculum as:

> ...curriculum in which students learn functional skills in the most appropriate setting for specific acquisition. It is one which prepares students for adult living and includes

> independent living, leisure, health and grooming, social skills, communication skills, vocational preparation and skill training, and generalizable skills, as well as community involvement through age appropriate content. (p.13)

Functional skills are defined by Wimmer (1981) as "specific, observable, and measurable performance demonstrated by the student and essential in carrying out social, personal, and on the job tasks" (p. 613). Functional skills are not considered part of the functional curriculum until they are taught in the context of use (Boyer-Stephens & Kearns, 1988).

Gajar et al. (1993) recommend the consideration of the following learner traits when selecting between functional and academic curricula for individual students: exposure to special education, the pattern of academic skill acquisition, individual student goals, and the student's behavioral response to high school. Schloss and Sedlak (1986) appear to utilize these considerations in their recommendation for curricular choices. They indicate that a functional curriculum should be chosen if: (a) new skill acquisition is significantly difficult for the student, (b) the skill repertoire of the student is not equal to his/her peers, (c) only a small part of each school day is spent in instructional activities, and (d) graduation is eminent. Furthermore, they recommend developmental (or academic skills) curriculum should be selected if: (a) it is fairly easy for the student to acquire new skills, (b) the skill repertoire of the student is equivalent to or slightly behind that of her/his peers, (c) instructional activities comprise the vast majority of time during the school day, and (d) there are many years before graduation.

Both Halpern (1992) and Clark (1994) present different views. Halpern (1992) expresses concern that even after three decades of special education services we are not making appropriate decisions or have adequate materials that would assist us in selecting "*what* we teach, *how* we teach, and *where* we teach" (p. 206). He states that curricular decisions are made without

consideration of generalization and maintenance or skills functionality. Thus, instructional settings are not relevant to skill performance and instructional tasks focus on remediation rather than the development of functional, usable skills (Halpern, 1992). Clark (1994) echoes these concerns in his answer to the question, "Who needs a functional curriculum?" He responds by saying:

> All children and youth in public schools today should be provided an education that is specific enough to provide them with the knowledge and skills they need to perform age-appropriate roles while in school and to meet the demands of being family members, citizens, and workers as adults. ... Few would argue that a large proportion of the population of students who are at-risk and many students with disabilities have difficulties using what schools provide for successful adult adjustment. ... Logic, research data, and now the IDEA mandate to at least address functional curriculum needs through transition planning for students age 16 and above all lead to only one answer to the question of who needs functional curriculum: All students with disabilities need such a curriculum, but each must be individually determined. p. 38

Each of the curricular models discussed above takes the perspective that there is a set of individually determined skills that each student must learn. Each of these curricular models attend to the skills themselves, rather than the processes of learning and problem solving (i.e., generalization and maintenance). Michaels (1994) calls this the "basic skills approach" (p. 135) and expresses concern that too little attention is given to "higher level skill areas" (p. 135). He proposes an expanded basic skills approach that includes process skills of task approach and problem solving, self-efficacy skills (e.g., self-monitoring), and social skills as critical fundamental skills for all students (Michaels, 1994). In concert with these concerns, the model described below attends to the "what" (e.g., performance skills) but also emphasizes the acquisition of learning processes that will allow the student to acquire new skills, perform variations of old skills, and be flexible in under new demands.

Proposed Model

Clearly, many factors which are related to the content and application of curricula may inhibit or facilitate transition (Hanley-Maxwell, 1986; Wehman, 1986). Keeping these factors in mind, an emerging model for transition enhancing curriculum and a general timeline for its implementation are described below.

Model for Individualized Skill Building

The curricular structure to be developed in this section builds on the model proposed by Udvari-Solner, Jorgensen, and Courchane (1992). Like the longitudinal vocational model (Udvari-Solner et al., 1992), it organizes skills to be taught from the primary grades on up. It differs in that it does not incorporate skills by traditional domains. The number and exact nature of instructional domains varies across the current literature (Jackson cited in Michaels, 1994). However, there are four generally accepted skill domains. These domains cover the academic, social, vocational, and independent living areas. This model moves away from these domains and proposes a different way of identifying and organizing critical skills. In addition, it is designed to be used with skill lists such as those reviewed in this synthesis, as well as with curricula that are already in place in the classroom.

The proposed structure is intended as a working model to make identification of and incorporation into the classroom curriculum of targeted skills more manageable and thus more successful. In this model, the skills that make up the areas or domains typically listed fall into three categories: (a) first-order or core skills; (b) higher-order skills, such as problem-solving; and (c) goal-specific skills or those skills that are needed by an individual for specific reasons having to do with the community he or she lives in, the job he or she desires, or his or her abilities

and limitations. These categories are introduced in a semi-sequential manner beginning in preschool and elementary school and continuing through high school and into adult services.

First-order or core skills. This category includes those skills that have been identified as being the most basic skills essential for post-school. These skills are often thought of as personal and community survival skills. All learners must have basic personal survival skills. These personal survival skills span a continuum from the simplest hygiene skills to domestic and living skills (Gajar et al., 1993; Ford et al., 1989). Skills related to general community survival are also found in this category. These skills include: functional reading, functional math, and functional writing. These skills are the skills that each individual must perform to shop, bank, recreate, and move about their communities (West, 1989; Brolin, 1983; Gajar et al., 1993; Snell, 1987).

Higher-order skills. While still considered important for post-school success, the skills in this category are more complex skills that will enable an individual to be more adaptable to changes in work and living settings. This area includes skills that must be taught within the context of other activities/instructional programs (e.g., time-management, social skills, problem solving, negotiation). It also includes social skills, the skills that relate to the ability to get along and communicate with others. Extensive research (Greenspan & Shoultz, 1981, Hanley-Maxwell, Rusch, Chadsey-Rusch, & Renzaglia, 1986; Chadsey-Rusch, 1986; Chadsey-Rusch & Gonzalez, 1988) has shown that social skills or the lack of appropriate social skills can have a dramatic impact on the success of any individual in any adult role, especially in employment roles as demonstrated by the following facts: the most common reason for termination is inappropriate social skills (Hanley-Maxwell et al., 1986; Greenspan & Shoultz, 1981); the most commonly

reported problems in the work environment are related to interpersonal communication (Chadsey-Rusch & Gonzalez, 1988); and the most common interaction in the work environment is joking and teasing (Chadsey-Rusch & Gonzalez, 1988).

Higher order cognitive skills also make up this category. These higher order cognitive skills are: self-directed learning strategies; problem solving; decision making; self-advocacy and assertion; and the cognitive behavior management techniques of self-instruction, self-monitoring/evaluation, and self-reinforcement/correction (Martin, Marshall, & Maxson, 1991; Mithaug, Martin, & Agran, 1987; Gajar et al., 1993; West, 1989). These skills are required if the individual is to be a flexible, responsible, and independently functioning adult.

Goal-specific skills. The most difficult group to ascertain, goal-specific skills include those that should be targeted based on an individual's interests, abilities and needs; and the idiosyncrasies of the community in which he or she will live and work. This final set of skills includes those skills that currently receive the most attention at the secondary and post-secondary levels (Halpern, 1992). These skills are the academic and specific technical skills required for targeted jobs or further academic training (Brolin, 1983; Brown et al., 1979; Elrod, 1987; Rusch, Schutz, & Agran, 1982; Udvari-Solner et al., 1992; Wehman, 1992; Wehman et al., 1988; Wircenski, 1992).

In general, goal specific skills are made up of first order and higher order skills. Whereas first order and higher order skills can be considered generic, goal specific skills are specific to the individual and the community in which he/she lives. Goal specific skills build on the core or roots of the model (i.e., first order and higher order skills) to support successful and meaningful outcomes. They are the branches of the model. It is important to note that without a solid

foundation of the basic skills (deep roots) and the higher-order skills (solid trunk), goal specific instruction will ultimately fail. "The tree cannot support the many branches of desired outcomes without strong and healthy roots."

Skills within and across these categories do not have to be acquired in sequential order. Many will be taught and learned simultaneously (e.g., social and communication skills, problem solving and community survival skills). But, when skills must be sacrificed because of time constraints or learner-related issues, sacrificed skills MUST NOT be those in the first-order or higher order categories: the personal survival skills, community survival skills, social/interpersonal skills, and higher order cognitive skills. The reason for this is simple. Adult lives are a rich and varied tapestry that are recreated each day. Early goals and plans, those identified in school, are reworked, revised, and often discarded as self-understanding increases. The experiences of childhood, adolescence, and even young adulthood reveals more about what is not wanted in adult life than what is wanted. In fact, many individuals change jobs several times in their adult lives. Thus, if the skills learned are only those which are job/career specific, young people are trapped into predetermined targets and flexibility as adults is reduced.

Timeline for Individualized Skill Building

The quintessential transition curriculum, including first-order, higher-order, and goal-specific skills lends itself to an organized and logical time-line for instruction. First-order skills can and should be infused into the regular (functional and/or academic) curriculum during the pre-school and elementary years (Brown, Certo, Belmore, & Crowner, 1976; Clark et al., 1991). Higher-order skills should be introduced during the early elementary years and refined during middle/ junior-high and high school. Finally, goal-specific skills should be explored and identified

during the later elementary grades, and continued into the middle/junior-high school years. These skills should then be targeted intensively during high school. As might be apparent when reviewing the three categories of skills, each category builds on the previous one(s). Specifically, minimal skills (e.g., task completion, working cooperatively, sharing tasks and materials, asking for assistance, offering assistance) are combined and augmented considering generalization and maintenance issues to form higher-order skills (e.g., time management, problem-solving, conflict resolution). Combined core and higher-order skills then become the basis from which goal-specific skills (e.g., specific job skills, specific community skills, specific leisure skills) are taught.

Supporting Literature

The model presented above was developed from a compendium of sources related to transition. The need for such a model is based on a review of the scope and content of the extant literature on transition: the skills identified as important, the instructional procedures said to be most effective, and the issues brought up time and again as problematic to the successful transition of students with disabilities from school to adult life. The framework from which the model grew is provided in this section. Reviewed first is the literature in the area of theory and philosophy related to transition. Following this section is a review of some examples of popular tools in the area of transition. The section ends with a discussion research related to skill needs identified in the examination of the post-school outcomes of education for people with disabilities. The goal of this literature review is to make clear the foundations from which the integrative model was developed.

Theory/Philosophy

To understand the scope of the model presented above, it is important to look at the

theories and philosophies that form the basis for the model. Gajar et al. (1993) argue, "...that for transition and transitional services to grow and become more effective, a more extensive, sounder theoretical base must be developed." (p. 427). Indeed, to truly appreciate the enormity and complexity of the issue of transition, it is important to consider the history of vocational education as well as current issues in transition. In this section, a brief review of the history of transition will be followed with a discussion of two issues that are drawing much attention in current transition literature: longitudinal planning and quality of life.

History of transition. The concept of educating youth for adulthood was not born with the transition movement. Throughout the history of American education, schools have been the means of educating children to be productive members of society, i.e., to work (Dewey, 1929). Transition, as it is defined today, is a direct descendent of two previous work-focused trends in education: (a) work/study and (b) career education.

In efforts to provide students with mild disabilities curricula that met both academic and vocational needs, the work/study programs of the 1960's were created (Halpern, 1973; 1974). These programs offered work placements to students prior to graduation from high school, and were enacted through the cooperative efforts of schools and rehabilitation agencies. While highly successful for most of a decade, the work/study programs were abandoned in the 1970's due to changes in funding requirements that made cooperative efforts between educational and rehabilitation agencies difficult (Halpern, 1992) and political arguments that led to confusion and disillusionment with the cooperative arrangements (Szymanski & Danek, 1985).

As work/study faded out, another career or work related movement, career education, came to the forefront. In contrast to work/study, career education focused on the general student

population and was not implemented as a formal interagency agreement. In addition, career education was introduced at the elementary school level and continued through secondary grades. As the movement gained momentum, two noteworthy developments unfolded. First, the concept was extended especially for individuals with disabilities. Second, the definition of career education began widening to include other, non-work related, aspects of adult life (Halpern, 1992), such as living independently, recreating and participating in community activities.

Unlike the work/study movement which ceased to exist as a result of changes in funding and regulation, the career education movement was repealed by the federal government. However, in the wake of both of these programs transition emerged as a national priority (Will, 1984). It is interesting to note that while work education has been a priority for students both in regular education and in special education, rarely have programs been directed to both populations simultaneously. In addition, it should be noted that while each of the preceding movements focused attention at different points in time, a longitudinal focus had not been obtained with either of the movements. Indeed, the federal mandate for transition also fails to take a longitudinal perspective, focusing instead on the ages of 16 to 21. The model proposed above does take into account the importance of the late secondary and early adult years, but also emphasizes the importance of the early school years in affecting successful adult outcomes.

Longitudinal transition planning. The decision to promote self-determination and independence must be made early in the school career and incorporated into the daily curriculum throughout the education of the individual. Indeed, Halloran (1993) states that self-determination should be the ultimate goal of all education. Students must be provided instruction throughout their school careers on the options, skills and outcomes that are selected by representatives from

all four perspectives: individual, family, community, and society. This emphasis on the importance of all aspects of an individual's life has been called the life-space perspective by Szymanski (1994). When combined with the life-span issues, which include career development (Szymanski, 1994), the result is a curricular model that teaches basic skills and processes with the idea of providing the individual with generalizable skills to use in making independent and meaningful life decisions.

Career development is a vital factor in a life-span approach to transition. Various career development theories attempt to describe the process of career development. One of these theories, work adjustment theory, is based on the constructs of work personality, work competencies, and work goals (Hershenson, 1981, 1984). Skills in these three areas develop throughout our lives in combination with each other and in conjunction with environmental influences. However, there are "primary periods" (Szymanski, 1994) during which each of these foundation pieces tends to develop.

"Work personality develops during the preschool years, work competencies during the school years, and work goals develop during the later school years" (Szymanski, 1994, p.403). More specifically, play enhances the development of work personality, home/school work responsibilities assist in the development of work personality and work competency, and career fantasy and exposure to work role models provides for the development of work goals which are further refined by career related experiences and learning opportunities. Additionally, work adjustment is further influenced by the expectations of family, culture and community (Szymanski, 1994). In other words, career development theory emphasizes the breadth of transition planning considerations and the longitudinal nature of the transition process.

Increasingly, those working in the area of transition are realizing the need to start the process earlier than mainstream current practice demonstrates (Clark et al., 1991). This emphasis on the early planning and implementation of transition combined with the growing concern for school support of independent behavior leads directly to a discussion of quality

Quality of life issues. In the early 1980's, when transition was considered to be the process of moving from school to work, the focus was on how to best prepare individuals with disabilities to fit into the competitive work world. This focus was, necessarily, a system's level view that prescribed goals for instruction based on the values of our society in general.

As transition became the movement from school to adult life, this system's level view broadened to include not only mainstream societal values, but also local community values. Again, this expansion of focus was necessary to ensure that individuals with disabilities acquired skills critical to the world of competitive work, but also acquired those skills necessary to shop in community stores, utilize mass transit systems, enjoy leisure activities at malls and theaters, and so on. However, the breadth of focus extended far enough that only prescriptive teaching could occur. That is, the systems level perspective was used to identify what skills and abilities were valued by society at large as well as within specific communities. These skills were then targeted for instruction in the classroom, community and workplace.

Halpern (1993) calls this systems level perspective the societal perspective and argues that from such a perspective, social norms are the frame of reference from which we work. He goes on to point out that from the individual perspective the most meaningful principle is that of personal choice. Any attempt to mesh the two perspectives should result in identifying socially acceptable outcomes for people with disabilities while acknowledging that these outcomes may

not be appropriate or desirable for any given individual (Halpern, 1993). What does this mean to the individual with disabilities? Halpern argues that "people must somehow recognize both personal needs and social expectations, and then use this information to 'create their own meanings so they can establish and sustain a viable self in the social world.'" (p. 489).

Today there is much written about quality of life (Halpern, 1993; Dennis et al., 1993), individual choice and dignity (Schloss, Alper & Jayne, 1994), and self-determination (Wehmeyer, 1994). The importance of the individual and family perspective on skills, needs, interests and desires is no longer an issue for the sidelines - it has come to the foreground and must be dealt with at all levels of transition planning. In fact, there is a growing body of research that suggests if the individual and family are not actively involved and supported, the individual will not succeed in post-school settings (Steere, Wood, Pancsofar, & Butterworth, 1990).

Current curricular tools appear to focus primarily on the societal perspective. The tools reviewed in the next section underscore the need for a critical re-examination of the theoretical orientation of current curricular practices.

Examples of Popular Tools

A number of worthwhile efforts to identify and teach those skills considered essential for maintained success in work, home, and community settings have been created. Select examples of these efforts are reviewed below according to the categories of skills identified as critical by some of the field's leading experts in the area of transition. Following this will be a discussion of the commonalities of existing curricula related to transition. This section concludes with a summary of the information provided in the section. The reader is referred to Cronin and Patton (1993) and West (1987) for a more detailed listing of curricula available in various life skill areas.

Selected examples. The examples selected for presentation were selected in a effort to represent curricula that are "disability identified", novel in approach, or most widely used. "Disability identified" curricula include the first four examples selected: Wehman, Wood, Everson, Goodwyn, and Conley (1988), Wircenski (1992), Baumeister and Morris (1992), and Gajar et al. (1993). Ford, Schnorr, Meyer, Davern, Black, and Dempsey (1989), Udvari-Solner et al.(1992), and West (1989) were selected because of their novel approaches. Finally, Brolin (1983) was included because of its prominence in the area of transition related curriculum.

Wehman et al. (1988) provide a comprehensive overview of vocational training issues for student with cerebral palsy. In this book, they suggest areas to be targeted for transition planning of students with multiple handicaps. The suggested areas would form the core of the curriculum and include: (a) employment and/or post-secondary education, (b) independent living services, (c) financial or income related services/activities, (d) recreation and leisure activities, (e) medical and therapeutic services, (f) social activities and sexual issues, (g) transportation, and (h) advocacy or legal issues. The emphasis is on the arrangement of services for each student and the acquisition of discrete goal specific skills to improve community functioning. No mention is made of process or higher-order cognitive skills or the weaving of discrete skills with process skills to enhance the flexibility of the student, now and in the future. This lack of attention to independence and process skills may be because the text is not intended to stand alone as a curriculum. However, it is also likely that because the students targeted by Wehman et al. (1988) are individuals who have severe handicaps, the absence of higher order skills is a reflection of a philosophy that targets discrete survival skills as the most important skills to be acquired.

The curriculum articulated by Wircenski (1992) targets students who are considered as

individuals with special needs. This generic category usually refers to students with milder handicaps who have had greater success in academic and higher order skill learning than students with severe handicaps. Because of the target population it would be logical to see greater attention provided to higher order skills. This is in fact the case. Wircenski appears to agree that the goal specific skills of financial management and job procurement and retention are important, but also suggests the following domains of instruction for students with special needs: (a) social skills, (b) communication skills, and (c) values clarification. In this curriculum, it is, the first-order or core skills that receive no attention or discussion.

In an article on a rural delivery model for vocational education of youth with special needs (i.e., cognitive disabilities, emotional/behavioral disabilities, sensory impairments, and physical disabilities), Baumeister and Morris (1992) suggest many of the same skills identified by Wehman et al. (1988) as well as by Wircenski (1992). However, these authors rearrange the skills into three distinct areas: (a) survival skills/problem solving skills, (b) career development/job seeking skills, (c) job keeping/work maturity skills. The emphasis on vocational development is clearly the priority of this curriculum, while other areas of adult life are ignored.

Gajar et al. (1993) provide more even attention to all aspects of adult life and skills that span the basic first-order skills to goal specific skills. They suggest a number of skill areas for students with mild disabilities (e.g., mild cognitive disabilities, learning disabilities, and emotional/behavioral disabilities). These include: (a) work support, (b) personal management, (c) personal health, (d) family living, (e) leisure, and (f) citizenship.

The most widely used and widely acclaimed curriculum that focuses on transition related issues is the Life-Centered Career Education curriculum (LCCE) originally developed by Brolin

(1983). The LCCE covers twenty-two major competencies and 102 sub-competencies in the following curriculum areas: (a) daily living skills, (b) personal-social skills, and (c) occupational guidance and preparation. Within each sub-competency there are specific instructional objectives for use by the teacher in developing instructional programs and assessing skill performance In addition to addressing a vast number of skills, the LCCE has with it measures to use in assessing the skills of the individual in relation to the curriculum (i.e., the Life Centered Career Education Competency Rating Scale, Brolin, 1991). This comprehensiveness is a feature that sets the LCCE apart, and is perhaps responsible for its commercial success. Even so, the result is another re-shuffling of skills into different categories.

The Syracuse Community-Referenced Curriculum Guide for Students with Moderate and Severe Disabilities (Ford et al., 1989) provides a slightly different perspective. Like the literature reviewed above, this guide includes skills organized into groups. The three major content areas are: (a) community living, (b) functional academics, and (c) embedded skills. These authors take skill-listing a step further by proposing an entire curriculum for teaching the skills in an individualized and functional manner. A companion volume, The Syracuse Curriculum Revision Manual: A Group Process for Developing a Community-Referenced Curriculum Guide, provides instructions for the year long process of developing a local version of the curriculum.

In their article on developing a longitudinal vocational curriculum, Udvari-Solner et al. (1992) also take skill listing a step further. They provide a model for implementing a functional transition curriculum. Here, skills from the traditional domains (i.e., domestic, recreation/leisure, vocational, community and school) are divided across the school career by age. This curriculum is beneficial in that it ensures that the identified skills will be a part of the curriculum. However, like

the Ford et al. (1989) model it is meant to be used as an independent curriculum.

Unlike the previous curricula, West (1989) provides a framework for developing functional curriculum for transition in Functional curriculum for transition: A resource guide. Like previous authors, she identifies the components or domains of a functional transition curriculum. These include: LCCE, communication, community access/mobility skills, employability skills, functional academic skills, generalizable skills, health and grooming skills, independent living skills, social skills, study skills, vocational competencies, and leisure skills. Unlike previously discussed curricula, each domain is presented through discussion; sample skills are listed; published materials in the target area are suggested; potential community resources are identified; parental activity recommendations are made; and additional readings are identified.

Common content. While the curricula reviewed above (and many others not reviewed) offer comprehensive listings of skill domains, skill clusters and specific skills needed for independent community living, none of them are all inclusive, nor could they ever be. As mentioned earlier, an effective transition curriculum is one that teaches the individual the skills that she or he will need to function in his or her adult world. This adult world will be different for every individual.

Because there is no way to be exhaustive in listing the ideal skills for inclusion in transition curricula, we will not replicate the work done by many authors in compiling skill listings. However, it is important to list those domains and skill clusters identified in the curricular materials reviewed. Tables 1 lists those domains and skills. It is clear that there are common areas (i.e., domains) in many of the curricula proposed for preparing students for adult life. These areas include: (a) communication skills, (b) community access/mobility skills, (c) employment

Table 1

An Incomplete Listing of Skills/Skill Clusters Identified in Transition-Related Articles and Curricula

Problem-solving
- Identifying a problem
- Exploring alternatives
- Selecting a response
- Engaging in a response
- Evaluating a response

Self-Advocacy

Self-Esteem

Self-Understanding

Decision-Making

Time Management

Coping and Adapting

Resource Development

Monitoring own performance

Self-feedback

Self-Correction

Appropriate Responding to Feedback

Self-Control/Management

Interpersonal

Goal Setting

Assertiveness

Reasoning

Planning

Making Choices

Recognizing and Responding to Authority

Stress-Management

Leadership

Personal Organization

Food Service

Home Industry

Horticulture

Janitorial

Office

Micrographics

Entry-Level Computer

Reading

Writing

Speaking

Listening

Keeping a file

Whole numbers

Fractions

Decimals

Percent

Mixed Operations

Measurement

Calculations

Estimation

Reading maps

Following directions

Responding to mail

Using the newspaper

Economic Self-Sufficiency

Controlling Personal Finances

Money Management

Bill Paying

Banking

Checking and Savings Accounts

Credit Cards

Making change

Marital responsibilities

Parenting

Childcare basics

Meal Prep

Housekeeping

Dusting

Emptying trash

Doing dishes

Making beds

Vacuuming

Mopping

Clothing Care

Washing Clothes

Folding Clothes

electricity and plumbing

Eating

Dressing

Self-Care

Hygiene

Personal Appearance

Mental Health

Physical Health

Exercise/Fitness

Preventative health

Shopping

Telephone

Mobility

Resource and Service Use

Job searches/finding

Job applications

Resumes

Interviewing

Job Retention

Work Habits

Working Independently

Understanding the Work

Routine

Adapting to New Work

Situations

Efficiency

Safety in worksite

Attendance

Asking for a Raise

Resigning/Quitting

Correcting work

(when told to)

Production rate

Conversations

Asking a question

answering questions

Asking for help

Accepting assistance

Offering assistance

Ordering tasks

Following instructions

Giving instructions

Accepting criticism

Apologizing

Convincing others

Cooperating with others

Initiating contact

Communicating basic needs

Identifying needs and

interests

Joking/Teasing

Giving criticism/feedback

Negotiating conflict

Resisting peer pressure

Perspective taking

Teamwork

skills, (d) academic skills, (e) health and grooming skills, (g) independent living skills, (h) social skills, and (i) leisure skills. However, a closer look into any of the above or other skill listings reveals many differences in how skills are organized and how much importance is placed on any given skill.

For example, In the LCCE (Brolin, 1983) telephone skills are not specifically identified in the listing of twenty-two major competencies and 102 sub-competencies. However, the correct use of the telephone is implied within other skills listed (e.g., responding in an emergency, communicating with others, maintaining relationships). In contrast, Gajar et al. (1993) specifically state telephone use (along with responding to mail and using the newspaper) is an essential part of communication skills in the domain of personal management. Such a disparity in emphasis raises concerns, especially when one considers that both of these sources target individuals with mild disabilities.

Summary. The curricula identified and reviewed above share many common features, not the least of which is a shared focus on real-life, functional skills. Each curriculum includes essential curricular components. Most often these components are reflected in the domains that organize the curriculum. The success of the skill identification and subsequent teaching must be measured in terms of outcomes for former students with disabilities. The next section examines this topic by reviewing research having to do with real-life outcomes for persons with disabilities as they move from school to adult life.

Research/Outcomes Studies

What happens to individuals with disabilities once they exit school is of prime importance to what happens to them while they are in school. Reviewed in this section is recent work

regarding post-school outcomes and activities identified as promoting successful post-school outcomes. These reviews are drawn together in a summary at the end of this section.

Post-school outcomes. Employment related prospects for individuals with disabilities are dismal. While full-time competitive employment is increasingly considered the most appropriate goal, the majority of individuals graduating or exiting special education programs are not attaining this goal (Mithaug, Martin, Agran, & Rusch, 1988). On the bright side, some current research is supporting the use of vocational education during high school, work-study job, and paid work experiences - suggesting that these activities are early predictors of post-school employment (D'Amico, 1992).

A follow-up survey of 234 special education students in Colorado (Mithaug, Horiuchi, & Fanning, 1985) found that while nearly 70% were employed at least part-time, most worked for marginal wages. These individuals rated the special education programs they had received in school as positive, but indicated that they need more training in specific vocational skills, as well as in social skills and skills needed for independence.

In a follow-up study of students with learning disabilities, Shapiro and Lentz (1991) found that for both students with and students without disabilities, 50% of the desired skills were not taught in high-school. The individuals in this study indicated that they desired more instruction on job related skills, including those for obtaining jobs as well as for completing specific tasks. The data in this study not only reflected that what was being taught in high school was not relevant to post-school needs, it also raised clear questions about the ability of 17 and 18 year old students to make career choices that will continue after exiting school.

Activities related to post-school success. A study conducted by Rusch, Enchelmaier, &

Kohler (1994) identified outcomes and activities related to employment for individuals between the ages of 16 and 25. These outcomes and the activities designed to promote them were identified as important by a select group of persons providing transition services. The top three outcomes were: (1) placement of students into competitive, integrated employment (including supported employment); (2) functional skill development of students; and (3) integrated education or training of individuals with and individuals without disabilities. The activities related to predicted enhanced employment outcomes included: the use of job placement services, collaboration with adult service agencies, provision of job exploration and job-training opportunities as part of the school curriculum, provision of job support services, provision of technical assistance to adult service agencies to provide job placement and support services. Activities which were thought to lead to higher levels of functional skill development were: use of instruments and procedures that identify individual functional skills and consumer preferences and life goals and development of individualized objectives for students that reflect functional skill development in the domains of vocational skills, independent living and community integration. Integrated education outcomes are reportedly facilitated by: the provision of training activities for students without disabilities as well as for those with disabilities, utilization of integrated competitive and supported employment placements, utilization of nonpaid volunteer placements in compliance with Department of Labor standards, and utilization of community-based education and training sites.

Rusch et al. (1994) also identify desirable outcomes at the program level, the organization level, and the community level. Other activities associated with acceptable outcomes at these levels include: utilization of the IEP to guide program development, use of job skill analysis,

documentation of student progress in employment-related skills, and the use of longitudinal studies to further evaluate how current programs are doing. Throughout the listing of outcomes and activities is an emphasis on collaboration and cooperation between schools and agencies.

Kohler (1993) reviewed a total of 49 documents including follow-up studies, theory-based or opinion literature, and pseudo- or quasi-experimental studies. She reports that over 50% of the documents cited vocational training, parent involvement and interagency collaboration as best practices in transition. Additionally, over 30% of the literature supported the use of social skills training, paid work experiences, and the use of individualized transition planning. Other practices that emerge from the review of the literature (but were not cited as often) and were supported by results in two studies included: employability skills training and integration, placement in least restrictive environments, and mainstreaming.

Summary. Clearly, the literature reviewed in this section supports the proposed model for transition. There is evidence that students are not succeeding in post-school settings (Edgar, 1987, Wagner, 1989). There is also evidence that students are not satisfied with what they learned in school (Shapiro & Lentz, 1991). There is obvious support for longitudinal planning and implementation of transition services related to work experience, training of functional skills, individualized assessment, inclusive education and training, and collaboration among service providers(Rusch et al., 1994; Kohler, 1993). In addition, there are the beginnings of empirical support for the success of some of these procedures in promoting post-school employment (D'Amico, 1992).

The need for additional follow-up and longitudinal studies regarding post-school outcomes of individuals with disabilities has been stated by the authors cited above (e.g., Rusch et

al., 1994; Kohler, 1993) and by others in the field (e.g., DeStefano & Wagner, 1993; Darrow & Clark, 1992; Halpern, 1990). We agree with the growing list of professionals who feel that we can better prepare current students if we know what is happening to past students in special education. However, we also caution that we need to move away from traditional outcome measures (e.g., number of hours worked, percent living independently) and target measures that relate more to the quality of life (e.g., satisfaction, happiness, fulfillment) of the graduate or school-leaver (Halpern, 1993). Additionally, future research must clearly identify those instructional and assessment practices that are highly correlated with long term success of students with disabilities (as opposed to just successful acquisition of skills).

Effective Transition Practices

Many factors related to the content and application of curricula may inhibit or facilitate transition (Hanley-Maxwell, 1986; Wehman, 1986). Content selection is based on all aspects of adult life. Selected aspects are carefully matched to potential needs and possible outcomes for each individual. Content changes are based on continual assessment and reassessment of the individual and the related settings. Target skills should have value in multiple life settings and reflect the needs identified in a functional assessment of the individual student and the communities in which he/she is expected to live and work. It is important to note specifically that because of the varied entry skill levels of each student, the varied interests of each student and his/her family and community, the varied outcomes desired by the student and his/her family, the varied family perspectives, and the varied community demands, there is no curriculum that can meet the transition needs of all students. This section will focus on practices which enhance the effectiveness of curricula which target transition. The importance of thorough and on-going

assessment, effective instruction and continuous/collaborative transition planning will be discussed. This synthesis DOES NOT cover adaptation and accommodation. The reader is referred to the synthesis that deals with these topics. However, it is important to note that the active use of adaptation and accommodation is inherent in all instructional practices. These considerations are a critical part of the process of individualization.

Assessment

Individualized curriculum that facilitates transition is determined through ecological assessment. In ecological assessment an individual's skills and skill needs are evaluated within the context of current and potential future education, employment, residential, and community setting demands (Browder & King, 1987). According to Brown-Glover (1992) this results in " . . the ecological curriculum [that] provides a true set of individualized goals." (p. 243). The individual's strengths and limitations in specific tasks are assessed along with existing and potential support systems for that individual (Pancsofar, 1986). Thus, ecological assessment involves (a) assessment of potential skill needs, (b) individual assessment, and (c) assessment of support systems. Each of these areas are discussed below. A summary all assessment topics ends this section.

Potential skill analysis. A vital part of ecological assessment, potential skill analysis includes both task-specific analysis and the analysis of social skills needed for survival in targeted settings (Rusch et al., 1982; Snell, 1987). Additionally, the analysis should include process skills or those "higher order" skills needed in various target situations. Observations at the targeted sites, interviews with knowledgeable individuals (Rusch, Rusch, Menchetti, & Schutz, 1980), and reviews of existing curricular materials in the targeted skill area are used to identify potential skill

needs. The identified skills then form the basic content of the assessment and instructional components (Hanley-Maxwell, 1986) and the basis for consideration of possible adaptation and accommodation needs (Parker, Szymanski, & Hanley-Maxwell, 1989). Aspects of possible content for assessment may also be adapted from some of the commercially available products designed to measure life skills (e.g., Street Survival Skills Checklist, Linkenhoker & McCarron, 1980; Tests for Everyday Living, Halpern, Irvin, & Landman, 1979; National Independent Living Skills Screening Instrument, Sands, Woosley, & Dunlap, 1985) and curriculum-based measures that accompany some functional curricula (e.g., the Life Centered Career Education Competency Rating Scale, Brolin, 1991).

Individual assessment. Not to be confused with readiness testing or tests of eligibility, assessment of the individual is used to determine programmatic needs (Parker et al., 1989). This determination is accomplished through a systematic examination of the individual's performance of essential skills and the examination of information about the person's learning history, future goals and aspirations, and likes and dislikes (Hanley-Maxwell & Bordieri, 1989) or interests. Assessment of the individual also includes the identification of support and adaptation needs (e.g., partial participation, natural supports, self-supports, materials adaptation, setting adaptation, task resequencing). This assessment must involve a longitudinal focus (i.e., across time) and in multiple settings. "Moment in time" assessment provides little usable information when making curricular decisions.

Support system assessment. This portion of the assessment process identifies potential facilitating and inhibiting relationships that may effect the successful adult outcomes. Support systems examined include friends, family and potential relationship in future jobs or residences

(Hanley-Maxwell & Bordieri, 1989). Available supports and potential support sources are matched to the current and projected support needs and wishes of the individual. Support needs and resource assessment are essential activities in the personal futures planning methods (discussed in Planning, this section).

Curriculum-based assessment (CBA). This form of assessment is similar in process to the individual needs assessment described above. However, CBA is typically tied to pre-determined curricula. Here skills that are taught within a targeted curriculum form the core of the assessment content. Students are put through an assessment that includes various examples of those skills within the targeted curriculum. Skills that are missing and the "base level" (skill level in relation to that required of the curriculum) of the student's performance is identified (Blankenship, 1985). This information is used to determine the "entry point" into the curricular sequence.

Summary. The process of ecological assessment includes identifying current and future environments, the skills necessary for successful functioning in those environments, the abilities of the individual in performing those skills, and the supports available, as well as those needed by the individual to function as independently as possible. Thorough and ongoing assessment (i.e., longitudinal and varied in skills, settings and materials) helps to identify and revise curricular content which is individualized and focuses on preparing students for adult life. However, appropriate curriculum is not sufficient for ensuring adequate transition preparation. Current research indicates that when considering long-term outcomes for students, how students are taught is as important as what students are taught. Instructional issues are discussed in the next section.

Instruction

Education for adult life (transition) should be based on a solid K-12 educational foundation. Components of a solid foundation for students with disabilities should include: (a) integrated educational programs (Gartner & Lipsky, 1989; Wehman, 1986), (b) community-based training (Stainback, Stainback, Nietupski, & Hamre-Nietupski, 1986), and (c) empirically proven instructional practices (Renzaglia & Hutchins, 1988; Berg, Wacker, & Flynn, 1990). These components are briefly explained and then summarized in the following paragraphs to assist in identifying quality transition preparation experiences for students with disabilities. The reader is encouraged to use the references provided for a more thorough discussion of these concepts.

Integrated education. Current thinking in special education stresses that students with disabilities should be educated side-by-side with students who are not identified as having a disability (Gartner & Lipsky, 1989; Wehman, 1986; Brown, Certo, Belmore, & Crowner, 1976). Such integrated education provides students with disability regular exposure to the people and demands of nonspecial/nonsheltered environments. Additionally, students without identified disabilities experience regular, positive exposure to the lives and assets of people with disability (Stainback, Stainback, & Bunch, 1989).

The current emphasis on inclusion throughout the school years lends itself to a debate over the benefits of inclusion for all ages and grade levels, versus the appropriateness of pull-out programs, such as community-based instruction. While the scope of this project does not leave room for such a debate, we feel that both inclusion and community-based instruction have useful outcomes for students with disabilities, and thus advocate for both in a comprehensive model of transition education. How and to what extent each is used should be determined through

systematic assessment and planning, as well as individual student and family wishes.

Community-based training. Community-based training allows for the integration of school into the larger context of home, employment, and community. Through its application, skill instruction is provided in the settings of use. This means that curriculum development and instructional materials selection are completed within the context of survival skills needed in the larger community. Instruction in the community allows for the use of the naturally occurring cues and consequences (Renzaglia & Hutchins, 1988; Berg et al., 1990). This coupled with the natural variation of community demands enhances the possibility that students will be able to use newly acquired skills in the diverse settings of their current and future lives (Stainback et al., 1986). Through community-based instruction students are exposed to career awareness activities; provided the opportunities to learn, practice, and refine actual adult-life skills; and taught community and independent living skills in multiple settings.

Empirically proven instructional practices. Successful instructional practices include the selection of real not simulated materials, the use of general case strategies for selection and presentation of examples (Horner, Sprague, & Wilcox, 1982), and the enhancement of student independence (e.g., using natural cues and consequences; teaching problem solving; encouraging initiation, self-assertion, self-generated cues and reinforcers). In addition, the use of specific instructional procedures to enhance maintenance and generalization of learned skills (Stokes & Baer, 1977) is critical for ensuring that skills will be used outside of the learning situation. Stokes and Baer (1977) describe eight ways to enhance the maintenance and generalization of skills being acquired. These methods include: sequentially modify; introduce to natural maintaining contingencies; train sufficient exemplars; train loosely; use indiscriminable contingencies; program

common stimuli; mediate generalization; and train "to generalize". While each method is different, all methods are used to assist students in responding to relevant aspects of task demands while ignoring irrelevant aspects. The result is greater flexibility in novel situations and enhanced autonomy. Instructional programs concerned with the utility of the skills learned and the flexibility of students to respond to novel situations should include attention to these instructional methods.

Summary. Integrated education, community-based instruction and instructional practices emphasizing student independence and flexibility contribute to better outcomes for student with disabilities. These factors plus attending to aspects of quality planning, identified in the next section, will enhance the effectiveness of any instructional effort targeting improved transition services.

Planning

Planning for transition is a much discussed topic. In fact, a brief review of the literature will reveal that this is the most frequently considered aspect of transition. Three aspects of transition planning are discussed in this section. These are: the four "Cs" of transition planning, utilizing personal futures planning tools to enhance transition success, and a review of IEP features that are critical to the transition planning process. The discussion of all three aspects is summarized at the end of this section.

The four c's of transition planning: Communication, collaboration, continuity and control. There are four aspects of transition planning that are critical to the success of the process. First, communication among the stakeholders/players is vital. All individuals involved in the process must interact at a level that allows for mutual understanding and empathy. Second, collaboration

among the stakeholders/players is vital. This means that up-front agreements about who is responsible for what must be reached and followed. Next is the importance of continuity. This is inherent in a longitudinal model such as the one proposed above. For the process to be successful, planning must be built upon the overall framework of transition. This requires continuity across grade levels, environments (home, school and community), and service providers. Finally, the issue of who is in control must be addressed. The person with the most at stake must be the one who is ultimately in control of the transition process. Logically, this is the individual with disabilities, around whom the process unfolds. Logistically, this may have to include a parent, guardian or some other individual who will act with the best interest of the individual in mind at all stages of planning and implementation.

Personal futures planning. Planning within a model of individual skill development, requires a brief return to the arena of assessment. While this return may be seen as redundant, it is intended to highlight the importance of this issue. When considering assessment it is important to include program planning devices that reflect a respect for the quality of life perspective. Some of the more promising approaches include the McGill Action Planning System or MAPS (Forest & Lusthaus, 1987), Lifestyles Planning Process (O'Brien & Lyle, 1987), Personal Futures Planning (O'Brien, 1987), the family-centered approach to early intervention (Dunst, Trivette, & Deal, 1988), and Choosing Options and Accommodations for Children or COACH (Giangreco, Cloninger, & Iverson, 1993). In addition to reflecting popular quality of life indicators, these approaches also show respect for family inclusive and student-centered (i.e., student controlled) programs. They are also ecological in scope, meaning that all current and future environments are considered in identification of needs and assets. Finally, and probably most importantly, these and

related approaches focus on the longitudinal nature of transition planning.

The IEP. As previously discussed, the IEP plays a pivotal role in long-range transition planning. However, if the IEP process does not progressively enhance the control that the individual students exert over their lives, then these students become victims of the process (Michaels, 1994). The IEP should be viewed as a tool that can be used to assist students in learning planning, self-advocacy, and responsibility skills. Students should not have IEPs completed for them "(or to) [them]" (Michaels, 1994, p. 14), they should be vitally involved in all aspects of the process. This is especially true in adolescence. "[A]dolescence is a critical period for the development of skills related to self-determination" (Wehmeyer, 1992, p. 308). During this time period individuals learn the skills necessary to develop realistic expectations. These skills include identifying physical and psychological needs, planning how to meet these needs, gathering necessary resources, and creating the actions required to meet those needs (Wehmeyer, 1992). The IEP process provides the vehicle for learning how to perform these self-determination skills.

Limitations

This literature review is qualified by the following limitations. The literature reviewed represented manuscripts listed in psychological abstracts and the ERIC databases for the last 10 years. Articles pertaining to transition in general, curriculum, secondary special education, and follow-up studies were reviewed. The initial review of articles was restricted to manuscripts that dealt specifically with transition curriculum. This review was later expanded to include some of the more general articles commonly mentioned in transition curriculum article reference lists and to ensure the inclusion of "benchmark" articles. In response to reviews, the literature was

expanded one more time to include more outcome and follow-up studies. Additionally, current popular texts related to transition were reviewed and included where appropriate. Finally, the concepts of curriculum from the perspectives of general education and vocational education perspectives were explored. This exploration included selected research in curriculum theory and content, secondary and post-secondary vocational education curriculum, and current educational philosophy. While the literature reviewed represents a broad approach to curriculum, and specific attention to transition, the authors make no claim as to having read everything that is available on selected topics. Thus, the conclusions reached within the context of this review reflect the viewpoints and results of the manuscripts selected for review, not the entire range of all possible views or results. Additionally, because so few curriculum articles presented research findings (most of the literature was theoretical and not research based), the authors did not use a statistical analysis procedure (e.g., meta-analysis) as part of the synthesis procedure.

Section C

Developing and Using Quality Transition Curricular Tools

Sections A and B provide the foundation of transition and the basis for needs related to transition curricular tools. This section summarizes areas of need and then provides content, application and philosophical guidelines for the use and development of quality curricular tools as they relate to transition. A discussion of barriers and an overall synthesis summary end the section. All guidelines and barriers are summarized in list form in Appendix A.

Areas of Need

Because transition to adult life is an area of special education that has received a great deal of recent focus, attention has been turned toward developing effective transitional tools. One of those tools IS NOT the development of A COMPREHENSIVE TRANSITION CURRICULUM. Instead, the most critical needs in the area of curricular tools related transition are the active inclusion of underrepresented areas in existing curricular options, a reorientation of professional practices related to the transition process, and the development of an organizing structure that assists teachers, parents and students in considering essential information when making curricular decision for each student. All three areas are summarized at the end of this section.

Under-represented Skill Areas

There are curricular areas across the literature that are under-represented or poorly developed. As in any endeavor that involves human judgement and interpretation, the content of any piece of literature will be affected to some extent by the experiences (and resulting biases) of the persons who wrote it (Pedhauzeur & Schmelkin, 1991). It is for this reason that we include in this section a sampling of skill areas that have been under-represented thus far.

One main area that is infrequently addressed is the skill area related to sexual relationships, marriage and families. This is due to a number of reasons. These include: (a) society as a whole does not see people with disabilities as sexual beings; (b) historically, people with disabilities have not been allowed to have children or be married; (c) teaching skills related to sexuality is controversial; and (d) many of these skills are not formally taught to individuals without disabilities. If our goal, as educators, is to prepare individuals for adult lives, than we must follow the examples set by Gajar et al. (1993) and others who advocate detailed curricula on sexuality. These curricula address such issues as reproduction, rape, abuse, prostitution, appropriate sexual relationships, dating, and sharing feelings.

Another area that is rarely included in school curriculum for learners with disabilities is that of civic rights and responsibilities. As Gajar et al. (1993) point out, civic rights and responsibilities go beyond voting and obeying the law to include lessons on avoiding victimization and contributing to society. Again, if our goal is to prepare students for full participation in their communities as adults, we must, when possible, go the distance in the levels of skills taught. Civic responsibilities usually requires some degree of self-management, problem solving and other self-efficacious skills. These skills are notably lacking from existing curricula related to transition.

Assertiveness and self-management are two related areas that are also not included as integral parts of the transition curriculum. Indeed, while there are entire curricula devoted to assertiveness training, rarely are such skills focused on as part of transition curricula. Likewise, while self-management (i.e., self-efficacy, self-determination) skills are given much lip-service, rarely are they included as encompassing parts of adult preparedness curricula. As noted earlier, Wehmeyer (1992) highlighted the importance of adolescence in the development of self-

determination. Skills necessary to develop realistic expectations must be learned during this period. Curricular offerings must be expanded in adolescence to include skills in: (a) the identification of personal needs, physical and psychological; (b) self-planning and gathering resources to meet the needs; and (c) acting to meet those needs (Wehmeyer, 1992). The IEP process is one of the most appropriate places to learn how to perform these self-determination skills.

Sexuality, civic duties, assertion and self-management are not the only skill areas under-represented in many transition-related curricula. As stated earlier, it is not possible, nor desirable to generate an exhaustive skill listing for transition instruction. What is important is to be aware of the strengths and short-comings of existent curricula so that in educating the individual learner the teacher may identify the learner's specific needs and choose from available curriculum resources.

Reorientation

In creating and implementing curricula that facilitate transition, many choices have to be made concerning the priority of certain skills over others. Early in the educational process, teachers, parents and students must decide which of the many competencies will be the focus. Particularly when a student has greater needs because of the severity of his or her disability, certain skills will be taught at the expense of not teaching other skills. Alternately, some skills will not need to be taught, either because parents have foreseen the importance of a skill(s) and have already taught it, or because the student has acquired the skill on his or her own. Later, decisions must be made about post-school options (e.g., post-secondary education, employment, living arrangements, etc.) and hence the higher-order and goal-specific skills that will be priorities for instruction. Again, as these decisions are made some skills will be focused upon, while others will

be sacrificed.

The importance of these decisions which concern school and post-school options is paramount to the success, satisfaction, and happiness of the student involved and to his or her family (Turnbull & Turnbull, 1986). Thus it cannot be stressed enough that the active involvement of the family and the student in all curricular decisions is crucial (Ford et al., 1989; Martin et al., 1991). This is especially true in light of evidence that what is being taught in high school is not relevant to post-school needs (Shapiro & Lentz, 1991).

Students and parents should be considered and treated as active and important members of the multi-disciplinary team, not as passive participants there to okay a plan of action decided in advance by school staff (Ford et al., 1989; Schnorr, Ford, Savern, Park-Lee, & Meyer, 1989). Home-school collaboration and active parent involvement are discussed and strategies are provided in a number of sources (e.g., Ford et al., 1989; Wehman et al., 1988). Additionally, utilizing the QOL planning strategies described above (McGill Action Planning System, Forest & Lusthaus, 1987; Lifestyles Planning Process, O'Brien & Lyle, 1987; Personal Futures Planning, O'Brien, 1987; the family-centered approach to early intervention, Dunst, Trivette, & Deal, 1988; and Choosing Options and Accommodations for Children or COACH, Giangreco, Cloninger, & Iverson, 1993) will enhance the involvement and direction of the planning process by students and their families. These processes are designed to help parents and students "vision" for the future. This ensures that planning takes a life-long perspective and students are provided with the vehicle to take charge of their own lives. Unfortunately, results from a study conducted by Shapiro and Lentz (1991) raised clear questions about the ability of 17 and 18 year old students to make career choices that will continue after exiting school. Clearly, any plans that students and their

families make must be flexible enough to accommodate the real changes that will occur in the post-school environment.

In addition to considering family and student wishes in curricular decisions, curriculum individualization should be based on student and community factors. It is critical to the success of transition planning to individualize the curriculum to the needs of the student and to the community in which that student will live and work (e.g., Ford et al., 1989; Wehman et al., 1988; Rusch et al., 1982; Sowers, 1991; Carlson, Scott, & Eklund, 1980). The previous section highlighting the involvement of students and families in the transition process is again relevant here.

Finally, teachers must carefully consider the impact of the choice of instructional strategies on the long-term performance of students in post-school settings. While current best practices are described in section B, many are based on short-term research results and speculation/extrapolation from these studies. Future research is needed to clearly identify those instructional and assessment practices that are highly correlated with long term success of students with disabilities (as opposed to just successful acquisition of skills).

Organizing Structures

It is clear that to be most successful, transition needs to include a planned, longitudinal process that is directed by parents and students. This planning process needs to attend to the development of process and self-efficacious skills and provide a life-long emphasis on career development. Achieving these goals will require the development of an organizational process and tool to assist in vision building/planning. Transition professionals will then need to acquire the skills to help parents, students, and teachers build and implement visions.

There are a variety of implications related to using the transition information provided in Sections A and B to make curricular choices or to assist in the development of organizational tools. These implication include the following changes: (a) reconsider the definition of adult success to ensure that success is individually determined and not equated with any particular outcomes (e.g., success does not equal college) but attends to a variety of Quality of Life (QOL) aspects; (b) realize that the quality of education is determined by its outcomes (e.g., QOL, former student satisfaction and future flexibility) not the number and type of skills learned; (c) understand the role of adolescence in the development of all students and realize that transition is not just an issue of adolescence (i.e., it is life-long); (d) understand the cultural context of education and the resulting conflicting perspectives; (e) realize the primary stakeholder in the process is the student and his/her family and that educators do not necessarily know what is best for each student; (f) help educators acquire new skills (e.g., vision building, releasing control, filling the role of facilitators - not program direction); (g) make changes in the educational system that include the reconceptualization of the role of secondary teachers, the day to day operating structure (i.e., semester length, time of day for instruction, school year length, length of instructional periods, grading procedures, assessment procedures), how resources are allocated, enhanced access to transportation, and an enlarge concept of where instruction should occur; (h) understand that ALL students need future planning which is completed systematically (even students with mild or no disability); (i) understand that graduation ISN'T a MAGIC THRESHOLD; (j) reconsider predetermined/established benchmarks in the areas of process (e.g., minimal competency testing, gateway assessments) and content (e.g., valuing certain types of knowledge and skills); (k) eliminate conflicting initiatives; (l) reconsider teacher/parent/student roles; (m) renew the

longitudinal nature of the IEP process; and (n) resolve the academic versus functional curriculum arguments.

Summary of Needs

A variety of needs have been identified in the above paragraphs. Listed below is a summary and specification of the most critical needs. Areas of critical need include:

1. how to help families and students do vision building,
2. how to plan educational programs based on those visions,
3. how to integrate skills/content from diverse sources into a meaningful whole,
4. how to use the concept of transition as a process and an organizing structure - not a curricular content area,
5. to recognize that we DO NOT NEED MORE SKILL LISTINGS -- THEY CAN NEVER BE EXHAUSTIVE ENOUGH,
6. how to use existing curriculum for transition planning (see West (1989) or Cronin and Patton (1993) for a discussion on how to "functionalize" existing curricula),
7. how to incorporate the community context, and
8. further research into what are transition facilitating teaching practices.

Guidelines for Development of Tools

Guidelines for the development of quality tools related to transition include examination of the areas of: content, application, and philosophy (implied and expressed). These areas are covered in the following section.

Content

Content must be longitudinal and individualized. Curricular tools focused on transition

must include critical survival skills, now and in the future. This means that the curricular tool needs to reflect a longitudinal life-span focus (Szymanski, 1994). As such, it must be designed for use during the early childhood, elementary, and secondary years. A longitudinal focus will require that specific attention be given to career development.

All transition related curricular tools should be developed with specific attention being given to content that includes skills needed at various chronological ages of a child's life as well as skills needed to survive in the adult world. However, the curricular tool must be flexible in design and require individualization in terms of specific content, method of instructional delivery, speed of movement through the curriculum, and mix of activities and materials. Specific content must be based on the results of ecological analyses, assessment of both the learner and the current and future environments of the learner. This content must also reflect community and familial cultural expectations, reflecting the life-space (Szymanski, 1994) of the student.

Processes to determine specific content needs must include functional student assessment strategies (West, 1989) to target skill acquisition needs (Vernon et al. cited in West, 1989). This guideline is operationalized by four specific steps identified by West (1989): (a) identify skills needed in current and future settings, (b) assess student in relation to identified skills, (c) analyze student performance, and (d) prioritized skills for instruction (functionality, age appropriateness). The tools must also include continuous reassessment of student and community environments as part of ongoing curricular quality assessment. Additionally, curricular tools must provide suggestions for different teaching activities when learning is not occurring, including adaptation suggestions for difficult activities (e.g., partial participation, alternative sequences, prosthetics, mediators).

Implementation of the curricular tool must emphasize family and learner involvement in identifying needed skills. Student, family, teacher and community should be involved in the content selection and implementation processes. Selected content should accommodate (Vernon et al. cited in West, 1989) and enhance learning characteristics of the student, and should build on real life experiences of each student (West, 1989; Wimmer, 1981)

Regardless of individualization there are core content must be included. These critical content areas are: skills to enhance learner flexibility and self-learning; skills based on adult life needs, personal, vocational, residential, and community; skills that promote social competence; and cognitive processing skills, problem solving, self-management, and self-determination (Mithaug et al., 1987; West, 1989; Wimmer, 1981). Cognitive process and social skills must be woven throughout all other content and activities. Furthermore, educational activities must include training in situations, not just discrete skills (Vernon et al. cited in West, 1989). This includes teaching the student how, when, where and why to use the knowledge/skill (Glasser, 1992).

Application

Application of curricular tools raises other critical issues. These issues include instructional methods, instructional activities, and instructional materials and locations.

Newly developed curricular tools should provide information about best instructional practices, incorporating methodology found to be most effective. They should also include methods for measuring student progress (Vernon et al. cited in West, 1989).

Learning activities must reflect the active role of the teacher in guiding the student's learning and include active student participation in learning new skills. Thus, instructional

activities will be student, not content centered. These activities must be focused on small groups and individuals (West, 1989; Wimmer, 1981).

The location of instruction is important for enhancing maintenance and generalization of newly acquired skills and processes. Thus, instruction should take place where the skill/task will be performed (Gajar et al., 1993), and use community-based instruction. Additionally, other practices that attend to maintenance and generalization should be incorporated (see Stokes & Baer, 1977).

Instructional activities and planning must involve professionals from various disciplines (West, 1989; Wimmer, 1981). No one professional should expect to be able to provide instructional experiences in all aspects of a student's life. However, the inclusion of professional from a variety of disciplines requires the planning team to pay particular attention to instructional aspects that are taken for granted by many special educators. These include: instructional activities must be age appropriate, curricular tools must include variations of activities to accommodate individual student differences, and instructional activities must include integrating discrete skills into larger application activities.

Finally, curricular tools must make recommendations for materials and settings. These recommendations must include how recommended settings and materials impact to enhance learner independence, generalization and maintenance.

General Philosophy

All curricula have underlying implicit and explicit philosophies. When developing quality transition curricular tools, these philosophies play a critical role in the success for students in post-school environments. Individuals developing curricular tools should attend to the

normalizing qualities of the instrument/guide being developed (Gajar et al., 1993), the emphasis on skill maintenance and adaptability (Gajar et al., 1993), and the emphasis placed on school-community-family partnerships in the educational process of each child (Dewey, 1929).

Barriers

There are many barriers to use and design of quality tools for transition. These are listed below. These barriers have not been derived from the literature reviewed, but have evolved from impressions of the literature and research conducted by the authors in relation to transition curriculum.

Use Barriers

Values and philosophies may be the most insidious of the barriers. Underlying beliefs about students and their families influence day-to-day and long-term decisions that educators make on behalf of these students.

First, many educators appear to believe that transition does not have to be actively planned for students (especially for students with mild disabilities or no disabilities). This belief is evidenced in lack of planning activities, types of curricula chosen, and experiences that students do and do not have during their school years. A University of Wisconsin survey (Hanley-Maxwell & Collet-Klingenberg, 1994) of 600 special educators from throughout the state revealed that 79% of the respondents do not currently use curricula that attend to transitional demands. Furthermore, when asked to describe the content of the curricula they currently employ, 18.6% of these respondents classified the content as academic, 13.7% indicated they used functional content, and 67.7% responded that their focus was a mix between academic and functional skills. The importance of traditionally, academic focused curriculum was even more evident when the

data was examined according to disability classification; 27.7% of teachers of students with learning or emotional disabilities indicated that they employed a academically focused curriculum, while 11.4% of teachers designated as working with students with cognitive disabilities shared the same focus. Additionally, 56.6% of all respondents indicated the curriculum used with their students was the same curriculum used with students in regular education. Clearly, current curricular decisions are not being made from the perspective of individualization and selection of life-long functional skills needs.

Furthermore, there is the belief that professionals, not families and individuals with disabilities should determine educational needs and goals. This belief is substantiated by the literature which addresses parental involvement in the IEP process. Many authors (e.g., Gartner, 1988; Henderson, Marburger, & Ooms, 1986; Meyen & Skritic, 1995; Ysseldyke, Algozine, & Thurlow, 1992) acknowledge the critical role that parents should play in the IEP process and provide descriptions of barriers to their active involvement and prescriptions to overcome these barriers. The fact that parental involvement was mandated in 1976 and in 1995 we are still discussing ways to include parents is a strong indicator that it simply is not happening. Hanley-Maxwell and Collet-Klingenberg (1994) provide hard data to support this supposition. They found that 84% of respondents to their survey included parental input into the selection of IEP goals and thus curricular content. However, descriptions of parental involvement primarily included attendance at IEP meetings. Furthermore, the less "severe" the disability, the less frequent the report of involvement of parents in the skill/skill areas selected (i.e., 80.1% of respondents designated as LD or ED; 82.9% CD; 90.5% low incidence disabilities).

If not all parents are involved (as mandated), then the newer mandate (IDEA, 1990) of

involving students in transition planning will probably be in jeopardy. Hanley-Maxwell and Collet-Klingenberg (1994) found that this was the case. In general, only 48.4% of respondents indicted that students played a role in the selection of curricular content. Since the teachers surveyed represented all grade levels, the data was further partitioned so that only those grades where student involvement in transition planning was mandated would be considered. Of the 90 respondents who reported working with secondary students, 43.3% reported that students DO NOT have input into what skills/skill area are taught.

It is clear from the results described above that many professionals believe that the planning and curricular selection activities must be accomplished solely by trained professionals so that they adequately reflect the realistic potential of the student. Furthermore, in over 57% of the responses received by Hanley-Maxwell and Collet-Klingenberg (1994) only one person, the teacher, chose the curriculum that was implemented for each student. Only 32.6% of respondents indicated that curriculum selection was done by an interdisciplinary team.

The results of these and similar practices have been devastating. While many advances have been made in the integration of individuals with disabilities into mainstream society, research suggests that many of these individuals are lonely (Chadsey-Rusch et al., 1992; Halpern, 1990; Lichtenstein & Michaelides, 1993) or have experienced other difficulties in adjustment after leaving school (Lichtenstein & Michaelides, 1993) including little or no adult service involvement. In addition, recent research indicates that there exists a mismatch between the outcomes valued by parents and families of individuals with disabilities and the outcomes sought by many teachers and other school/work related professionals (Hanley-Maxwell, Whitney-Thomas, & Pogoloff, 1994; Ferguson, Ferguson, & Jones, 1988). This mismatch is possibly due to the perspective taken by

each party.

The perspectives of parents and other family members (and indeed the individual) reflect an individual or family perspective. Teachers and other school or work professionals usually view transition from a community or societal framework. Thus, parents, families and individuals with disability are focused on achieving their personal needs and desires. Professionals, however, often remain focused on what services the various systems provide or can sustain and on achieving those outcomes identified at a "macro-level" as appropriate outcomes for all individuals as they grow into adulthood. Furthermore, professionals operating with a systems-level perspective make important life-decisions for students with disabilities, rather than with them and their families. This can result in outcomes which are not desirable to the individual or the family and which fail once continuous supports are removed (Hill, Seyfarth, Banks, Wehman, & Orelove, 1987). Clearly individuals and their families have to ACTIVELY direct the decision-making and planning processes. Fortunately, there is evidence that this can and does occur in some areas.

The current educational systems appear to foster value of only certain types of knowledge/skills (i.e., academic versus applied skills) and certain kinds of knowledge/skills mean access to future opportunities (e.g., high SAT or ACT scores means college). Thus, while students, their families, and communities members may feel that "non-valued" skills and knowledge are critical, educators who are aware of the ultimate reward structure will continue to push students to learn skills that ultimately are nonfunctional to that student's survival in the adult world. This conflict is further exacerbated by the fact that currently practicing educators are not taught to think in systems and total life perspectives. Without these perspectives, identifying critical adult skills is virtually impossible.

Systems of human services also pose barriers to the development of quality tools related to transition. The current educational system prevents total individualization by putting constraints on the use of teacher time, transportation, access to needed settings and materials, and by established general bench-marks (e.g., minimal competency testing) and conflicting initiatives. The changes needed will be further thwarted by the general inertia of systems when faced with change.

Development Barriers

Barriers related to the development of effective tools in transition may be examined from the same perspectives. First, there is a clearly articulated desire for the creation of cookbooks that do it all rather than guidelines for how to individualize and pick from existing curricula. Such a cookbook is impossible because the meaning of transition, as a process and organizational structure is still evolving. Additionally, no research exists identifying specific skills which are critical for ALL students (with the exception of social skills). Finally, adult life is too complex and individualized to reduce to a specific set of skills.

Additional systems barriers must also be overcome in the development of effective tools. One of these additional system's barriers that must be overcome is the fact that the system of education is too disconnected from non-education and post-education settings and services to allow for effective understanding each other. Without a thorough understanding of the demands and circumstances of the various systems involved in the transition process, transition planning and the development of quality tools will result in splintered efforts.

Finally, one of the most fundamental barriers related to the development of quality transition tools is the fact that current curricular decisions are driven by practices that lack

empirical basis and are sometimes not well grounded in theory. A more extensive, sounder theoretical base must be developed and explicated (Gajar et al., 1993). A cognizant view of underlying theory is critical to the development of sound, future research and practice. One theoretical area relates to the purpose of education. Transition forces a redefinition of the purpose of education, from elitism to parochialism. Implications of the changing purpose must be considered and planned for in any initiative. For instance, a redefinition of educational purpose may result in a power shift which would threaten the current status of individuals who benefit from the current system (Apple, 1982). Practices that lead to such changes would be met with violent opposition.

The last question to be answered is, "Will educators use commercial curricular materials related to transition?" Slightly over 36% of the respondents to the Hanley-Maxwell and Collet-Klingenberg (1994) study indicated that they currently use commercial curricula. However, 39.4% indicated that they do not, and the remaining 24% said that they use a combination of commercial curriculum and teacher made curriculum. Furthermore, less than one percent of the respondents indicated that they would use a commercial transition curriculum as is (without revision or adaptation). Approximately 64% indicated that they would use a commercial transition curriculum but would adapt or revise it to meet the individual needs of their students. Eight percent were not sure whether they would use a commercial curriculum on transition, and 26.6% indicated that they would not use it because of the individualized nature of special education and transition. Finally, a look at where students receive their education reveals that even if transition curricula were developed, its implementation would be limited unless such curricula target ALL student (87.9% of respondents indicated that their student receive

instruction in the regular education curriculum and 55% of all respondents reported that all instruction took place within the school setting). These statistics support the contention that a new "transition curriculum" is not needed. What is needed is an organizing structure that assists students, parents and professionals in developing individualized, longitudinal curricula that facilitate improved adult outcomes for students with disabilities.

Conclusion

The goal of curriculum focused on transition for students with disabilities is to prepare them for life after graduation. More specifically, the desired outcome is for students to leave high school prepared to deal with the rights and responsibilities of adult life, which may include (but is not limited to): employment or post-secondary education, independent or semi-independent residence, participation in chosen community events or activities, and civic responsibilities.

A problem inherent in identifying goals for students with disabilities is the imposition of the values of caregivers, teachers, parents and society onto the individual. Early goals of the transition movement articulated by Madeline Will (1984) were limited to employment outcomes. Later the term transition was expanded to include other post-school environments that an individual would likely encounter. In both definitions of transition the setting of goals were typically limited to a societal or systems-level perspective. More recent work in preparing students with disabilities for life after school has focused increasingly on the community in which the individual will work and reside as an adult (Wehman, 1992). While this has broadened the systems-level perspective somewhat, it has not changed the perspective. That is, the emphasis of transition planning and instruction continues to be based on pre-determined choices, rather than actively including the individual and the family in making decisions regarding goals and

instruction.

Not only does the systems-level perspective ignore the importance of family and individual contributions, it results in lists of skills to be acquired in order to meet goals set by society and professionals. By including the perspective of the individual and the family directly in planning and implementing transition services, an emphasis can be placed on self-determination. Once self-determination becomes the main educational goal, the basic skills and processes needed to make independent post-school choices will become the essential goals of all instruction (not being limited to the transition component of the IEP). Therefore, a less value laden goal of transition (read education) for individuals with disabilities is to prepare them to make autonomous decisions in order that they may achieve meaningful adult roles.

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Footnote

[1] These students include those children receiving the following categorical services: learning disability; mental retardation/cognitive disability; physical/orthopedic handicap; multiple impairment; sensory impairment - deaf, blind; behavioral/emotional disturbance; traumatic brain injury; other health impairment (OHI); speech and communication impairment. For a detailed description of students with these disabilities and their transition related planning, the reader is referred to the following chapters in Wehman, P. (1992) - Life beyond the classroom: Transition strategies for young people with disabilities: Brown-Glover, students with mild disability; Griffin, sensory impairment; West, Wehman, and Sherron, Traumatic Brain Injury; West et al., orthopedic impairment and Other Health Impaired; Gertzel and Gugerty, learning disability; and Wehman, emotional/behavior disability.

APPENDIX A

Summary of Barriers and Guidelines

5. the system of education is too disconnected from non-education and post-education settings and services to allow for effective understanding each other

6. current curricular content is driven by ideas that lack of empirical basis

7. transition forces a redefinition of the purpose of education, from elitism to parochialism

Guidelines for Development of Tools

Content

1. reflect a longitudinal life-span focus (Szymanski, 1994), must be designed for use during the early childhood, elementary, and secondary years

2. give specific attention to career development

3. include skills needed at various chronological ages of a child's life as well as skills needed to survive in the adult world

4. be flexible in design and require individualization in terms of specific content, method of instructional delivery, speed of movement through the curriculum, and mix of activities and materials

5. be based on the results of ecological analyses, assessment of both the learner and the current and future environments of the learner

6. reflect community and familial cultural expectations, reflecting the life-space (Szymanski, 1994) of the student

7. include functional student assessment strategies in processes to determine specific content needs (West, 1989) and target skills acquisition needs (Vernon et al., cited in West, 1989). Include processes for: (a) identification of skills needed in current and future settings, (b) assessment of student in relation to identified skills, (c) analysis of student performance, and (d)

Barriers

Use barriers:

1. the belief that transition does not have to be actively planned for students with mild disabilities or no disabilities

2. families and individuals aren't trusted to be able to determine educational needs and goals

3. system prevents total individualization - time, transportation, access to needed settings and materials, established general bench-marks (e.g., minimal competency testing), conflicting initiatives

4. current educational systems appear to foster value of only certain types of knowledge/skills (i.e., academic versus applied skills)

5. certain kinds of knowledge skills mean access to future opportunities (e.g., high SAT or ACT scores means college)

6. currently practicing educators are not taught to think in systems and total life perspectives

7. inertia of systems when faced with change

Development barriers:

1. the spoken need for the creation of cookbooks that do it all rather than guidelines for how to individualize and pick from existing curricula

2. the meaning of transition, as a process and organizational structure is still evolving

3. no research exists identifying specific skills which are critical for ALL students

4. adult life is too complex and individualized to reduce to a specific set of skills

prioritization of skills for instruction (functionality, age appropriateness)

8. include continuous reassessment of student and community environments as part of ongoing curricular quality assessment and provide suggestions for different teaching activities when learning is not occurring, including adaptation suggestions for difficult activities

9. emphasize family and learner involvement in identifying needed skills, content should accommodate (Vernon et al. cited in West, 1989) and enhance learning characteristics of the student

10. select content to build on real life experiences of each student (West, 1989; Wimmer, 1981)

11. include critical content areas: skills to enhance learner flexibility and self-learning; skills based on adult life skill needs, personal, vocational, residential, community; skills that promote social competence; and cognitive processing skills, problem solving, self-management, self-determination (Mithaug et al., 1987; West, 1989; Wimmer, 1981); weave cognitive process and social skills throughout all other content and activities

12. include training in situations, not just discrete skills (Vernon et al. cited in West, 1989), especially how, when, where and why to use the knowledge/skill (Glasser, 1992).

Application

1. provide information about best instructional practices, incorporating methodology found to be most effective (Vernon et al. cited in West, 1989)

2. include methods for measuring student progress (Vernon et al. cited in West, 1989)

3. reflect the active role of the teacher in guiding the student's learning (West, 1989; Wimmer, 1981)

4. ensure instructional activities are student, not content centered (West, 1989; Wimmer, 1981)

5. focus instructional activities on small groups and individuals (West, 1989; Wimmer, 1981)

6. include active student participation in learning new skills (West, 1989; Wimmer, 1981)

7. provide instruction where the skill/task will be performed (Gajar et al., 1993), use community-based instruction

8. involve professionals from various disciplines in instructional activities and planning (West, 1989; Wimmer, 1981).

9. enhance generalization and maintenance of skills and knowledge

10. use only age appropriate instructional activities

11. include variations of activities to accommodate individual student differences

12. include integrating discrete skills into larger application activities

13. make recommendations for materials and settings (include how recommended settings and materials impact to enhance learner independence, generalization and maintenance)

General Philosophy

1. ensure normalization (Gajar et al., 1993)

2. promote maintenance and adaptability (Gajar et al., 1993)

3. emphasize school-community-family partnerships in the educational process of each child (Dewey, 1929)